

PEACH LEAF CURL, TAPHRINA DEFORMANS (BERK.) TUL. OF PEACH,
PRUNUS PERSICA (L.) BATSCH

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Peach leaf curl, if uncontrolled, can be a serious disease in most of the peach-growing areas of the world. This disease is important in all peach-growing areas of the United States except in the irrigated sections of Washington and the semi-arid regions of the Southwest. The peach leaf curl organism also attacks nectarines, apricots and almonds. Low temperatures and wet weather at the time when new leaves are opening from the bud appear to favor the peach leaf curl disease (2). In Florida unsprayed trees have shown little or no disease, and to date peach leaf curl has been of minor importance (3). In February 1966 approximately 150 unsprayed peaches of the Bonita variety in 5 gal containers were observed showing moderate to severe symptoms of peach leaf curl.

SYMPTOMS. Peach leaf curl is generally confined to the new growth of leaves, blossoms, twigs, and fruit. With the onset of new growth in the spring, the diseased leaves are curled, arched, puckered, and distorted. The affected tissue is much thickened and very firm. The leaf margins curl inward so that the undersurface of the leaf is a series of concave chambers (Fig. 1). In some cases the entire leaf shows these symptoms, although it is not uncommon for small portions to be affected. Peach leaf curl symptoms may be minor, wherein only a few leaves may show distortion, to very severe with practically all of the foliage affected. Malformed leaves acquire a red or purplish cast making them especially conspicuous (1).

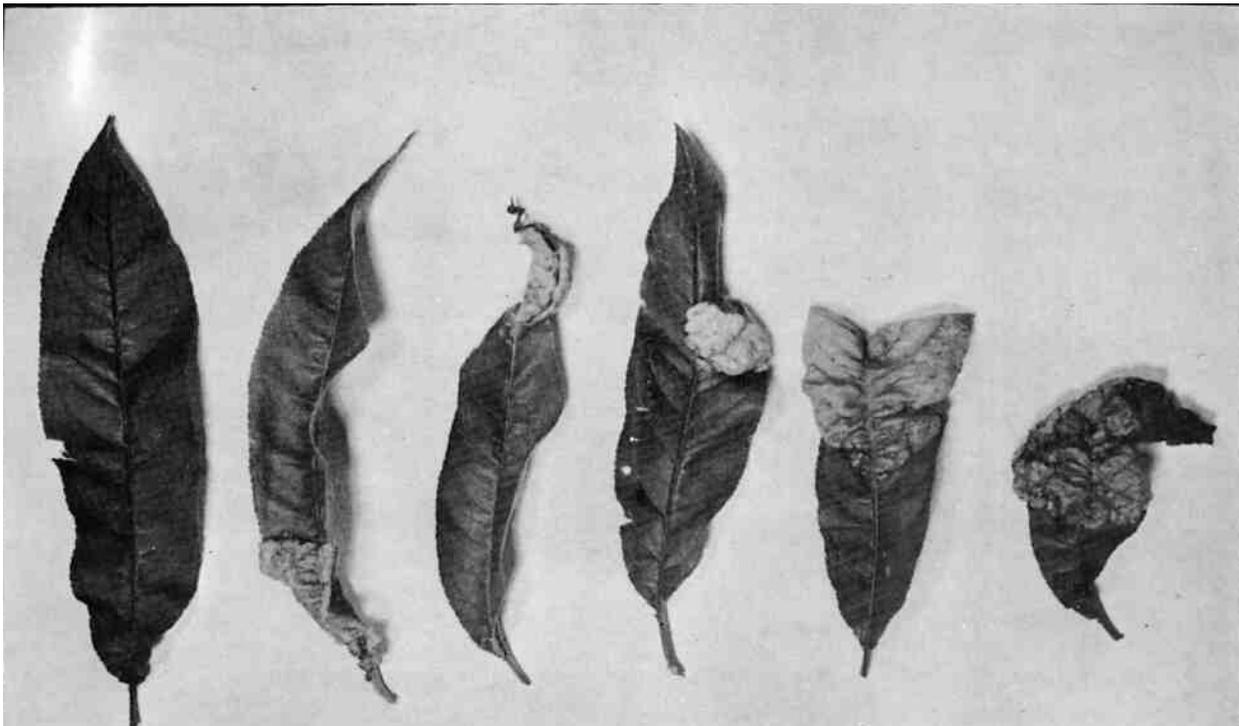


Fig. 1. Peach leaf curl, *Taphrina deformans* (Berk.) Tul. on peach, *Prunus persica* (L.) Batsch Bonita variety. Leaf on left is healthy.

CONTROL. The use of lime sulfur is recommended at a 1-15 dilution (1-9 if San Jose Scale is also a problem); Bordeaux mixture up to 10-10-100 formulation (4). Ferbam and dichlone are other fungicides suggested. Only one application is needed. It can be made in the fall after trees have shed their leaves, in winter when the temperature is above freezing, or in the spring before buds begin to swell. Chemical treatments for peach leaf curl control should not be made after leaves start to grow as the disease will not be controlled successfully and the trees may be injured by the chemicals (5).

Literature Cited

1. Andersen, H. W. 1956. Diseases of fruit crops. McGraw-Hill Book Co., New York. 501 p.
2. Heald, F. D. 1933. Manual of plant diseases. McGraw-Hill Book Co., New York. 953 p.
3. Sharpe, R. H. and Roger Parker. 1963. Peach production in Florida. Fla. Agr. Ext. Serv. Cir. No. 264. 16 p.
4. Westcott, Cynthia. 1960. Plant disease handbook. D. Van Nostrand Co., Inc., Princeton. 825 p.
5. U. S. Department of Agriculture. 1964. Growing peaches east of the Rocky Mountains. Farmers' Bull. No. 2205. p. 16.